Abstract

A portable data storage device is capable of storing and easily transporting large amounts of data and in which access to the data can be secured by a polynominal key generated by pseudo random generated parameters. The device can act as a host or a client in respect of access to the data thereby providing protection not only for the data held within the device but also to the computer to which the device is attached. Data is stored in layered memory architecture providing a secure primary and secondary partition structure.